

## Glossary



Bill Thompson

*Song sparrow*

## Glossary, Acronyms, and Species Scientific Names

- Glossary
- Acronym
- Species Scientific Names



## Glossary

<b>active adaptive management</b>	Management that involves deliberately implementing and testing a range of management option or actions in order to learn which is most effective.
<b>adaptive capacity</b>	The ability of a conservation feature or human community to adjust to the impacts of climate change.
<b>adaptive management</b>	The process of “learning by doing” by taking either a singular approach or intervention or a range of conservation interventions, monitoring the effectiveness of these approach(es), and using that feedback to make improvements in the management intervention(s).
<b>abiotic</b>	nonliving; a physical feature of the environment such as climate, temperature, geology, soils
<b>alternative</b>	a set of objectives and strategies needed to achieve refuge goals and the desired future condition.
<b>ambient</b>	of the surrounding area or outside environment
<b>anadromous fish</b>	fish that spend a large portion of their life cycle in the ocean and return to freshwater to breed.
<b>anuran</b>	relating to frogs and toads, any vertebrate of the order Anura
<b>appropriate use</b>	<p>a proposed or existing use on a refuge that meets at least one of the following three conditions:</p> <ol style="list-style-type: none"> <li>1. the use is a wildlife-dependent one;</li> <li>2. the use contributes to fulfilling the refuge purpose(s), the System mission, or goals or objectives described in a refuge management plan approved after October 9, 1997, the date the National Wildlife Refuge System Improvement Act was signed into law; or</li> <li>3. the use has been determined appropriate as specified in section 1.11 of that act.</li> </ol>
<b>approved acquisition boundary</b>	a project boundary that the Director of the U.S. Fish and Wildlife Service approves upon completion of the planning and environmental compliance process. An approved acquisition boundary only designates those lands that the Service has authority to acquire or manage through various agreements. The approval of an acquisition boundary does not grant the Service jurisdiction or control over lands within the boundary, and it does not make lands within the refuge boundary part of the National Wildlife Refuge System. Lands do not become part of the System until the Service buys them or they are placed under an agreement that provides for their management as part of the System
<b>aquatic</b>	growing in, living in, or dependent upon water.
<b>aquatic barrier</b>	any obstruction to fish passage.
<b>archaeology</b>	the study of human cultures

<b>avian</b>	of or having to do with birds
<b>basin</b>	the surrounding land that drains into a water body.
<b>beaver deceiver</b>	a fence that discourages beaver from damming areas.
<b>best management practice</b>	land management practices that produce desired results (usually describing forestry or agricultural practices effective in reducing non-point source pollution.
<b>bioaccumulation</b>	an increase in concentration of a chemical in an organism at a higher level than expected.
<b>biological diversity</b>	the variety of life forms and its processes, including the variety of living organisms, the genetic differences among them, and the communities and ecosystems in which they occur.
<b>biological integrity</b>	biotic composition, structure, and functioning at genetic, organism, and community levels comparable with historic conditions, including natural biological processes that shape genomes, organisms, and communities.
<b>biological planning</b>	The process of identifying priority conservation species and measurable targets such as population objectives, assessing the current status of populations (increasing, decreasing, static), identifying threats and limiting factors, and building models to describe the relationship of populations to habitat and other limiting factors.
<b>biophysical region</b>	a geographic region described based on a broad pattern of geology, topography, climate, and species distribution.
<b>bird conservation region</b>	ecologically distinct regions in North America with similar bird communities, habitats, and resource management issues.
<b>birds of conservation concern</b>	A list we developed from the most current conservation assessments from three bird conservation plans: Partners in Flight, The United States Shorebird Conservation Plan, and the North American Waterbird Conservation Plan. We developed rules to narrow these lists by focusing on species, subspecies, or populations that have declining trends, small population sizes, and are facing severe threats at some point in their annual cycle.
<b>bog</b>	soggy, moist, spongy, or otherwise wet areas with peat soils—the partially or incompletely decomposed remains of dead plants and some animals. A type of peatland.
<b>buffer</b>	lands bordering water bodies that reduce runoff and nonpoint source pollution
<b>canopy</b>	the layer of foliage formed by the crowns of trees in a stand. For stands with trees of different heights, foresters often distinguish among the upper, middle and lower canopy layers. These represent foliage on tall, medium, and short trees. The uppermost layers are called the overstory.

<b>catadromous</b>	refers to fish that migrate from freshwater to saltwater to spawn and reproduce.
<b>categorical exclusion</b>	a category of Federal agency actions that do not individually or cumulatively have a significant effect on the human environment.
<b>clear-cutting</b>	method of timber harvesting in which all trees in a forested area are removed in a single cutting.
<b>coarse filter</b>	Conservation features intended to compensate for our incomplete knowledge of all biodiversity by reflecting diversity at a higher level of ecological organization that can more readily observe, such as ecosystem types.
<b>community (ecological)</b>	Relatively distinct assemblages of species that co-occur in space.
<b>community</b>	a distinct assemblage of plants that develops on sites characterized by particular climates and soils, and the species and populations of wild animals that depend on the plants for food, cover and/or nesting.
<b>compatible use</b>	a wildlife-dependent recreational use, or any other use on a refuge that will not materially interfere with or detract from the fulfillment of the mission of the Service or the purposes of the refuge.
<b>compatibility determinations</b>	a required determination for wildlife-dependent recreational uses or any public uses of a refuge.
<b>Comprehensive Conservation Plan</b>	a document that describes the desired future conditions of the refuge, and specifies management direction to achieve refuge goals and the mission of the National Wildlife Refuge System.
<b>conceptual model</b>	A descriptive model of a system based on qualitative assumptions about its elements, their interrelationships, and system boundaries.
<b>conservation design</b>	the application of scientific information, expert opinion, and spatial data that helps us to establish estimates of where and how to achieve our mission through landscape sustainability. It is the integration of multiple objectives and the determination of how to efficiently apportion objectives across the landscape and among Refuge System units.
<b>conservation easement</b>	a legal agreement between a landowner and a land trust or governmental agency that permanently limits some uses of a property to protect its conservation values.
<b>constraint</b>	A condition that restricts potential options in a conservation plan (e.g., total budget or actions that have already been committed to).
<b>cool-season grass</b>	introduced grass for crop and pastureland that grows in spring and fall and is dormant during hot summer months.
<b>Cooperative Agreement</b>	a usually long-term habitat protection action, which can be modified by either party, in which no property rights are acquired. Lands under a cooperative agreement do not necessarily become part of the National Wildlife Refuge System

<b>cost</b>	The money, staff time, capital equipment, and other resources necessary to plan for and more broadly implement a strategy, action, or conservation plan.
<b>cover-type</b>	the current vegetation of an area.
<b>critical habitat</b>	according to U.S. Federal Law, the ecosystems upon which endangered and threatened species depend.
<b>cultural resource</b>	those parts of the physical environment—natural and built—that have cultural values to some sociocultural group or institution. Cultural resources include historic sites, archaeological sites and associated artifacts, sacred sites, buildings, and structures.
<b>culvert</b>	a tunnel carrying a stream or an open drain under a road, trail, or railroad
<b>defoliate; defoliator</b>	remove a plant's leaves, something that removes a plants leaves
<b>designated landscape</b>	Landscapes, seascapes, and watersheds whose configuration and function have been heavily influenced by people, generally for their benefit.
<b>diameter at breast height</b>	(dbh)—the diameter of the stem of tree measure at breast height (usually 4.5 feet above the ground). The term is commonly used by foresters to describe tree size.
<b>disturbance</b>	a disruption in the natural plant succession of a community or ecosystem resulting in a new community.
<b>early successional habitat</b>	Succession is the gradual replacement of one plant community by another. In a forested ecosystem, tree cover can be temporarily displaced by natural or human disturbance (e.g., flooding by beaver, or logging). The open environments created by removal of tree cover are referred to as 'early-successional' habitats because as time passes, trees will return. The open conditions occur 'early' in the sequence of plant communities that follow disturbance. We define <i>early successional forest</i> in this CCP as: the shrub-sapling stage; 0-15 years old.
<b>ecological integrity</b>	The condition or health of an ecosystem or habitat; in particular, how intact it is.
<b>ecological succession</b>	the orderly progression of an area through time in the absence of disturbance from one vegetative community to another.
<b>ecoregion</b>	a territory defined by a combination of biological, social, and geographic criteria, rather than geopolitical considerations; generally, a system of related, interconnected ecosystems.
<b>ecosystem</b>	a dynamic and interrelated complex of plant and animal communities and their associated non-living environment.
<b>ecosystem approach</b>	a strategy or plan to protect and restore the natural function, structure, and species composition of an ecosystem, recognizing that all components are interrelated.

<b>ecosystem process</b>	a natural phenomenon in an ecosystem
<b>ecosystem services</b>	the goods and services that natural ecosystems deliver to people.
<b>effluent</b>	outflow of water from a structure, such as wastewater discharge from a sewage treatment plant or industrial facility.
<b>emergent marsh</b>	wetlands dominated by erect, rooted, herbaceous plants.
<b>endangered species</b>	any species of plant or animal defined through the Endangered Species Act as being in danger of extinction throughout all or a significant portion of its range, and published in the <i>Federal Register</i> .
<b>Environmental Assessment</b>	a systematic analysis to determine if proposed actions would result in a significant effect on the quality of the environment.
<b>environmental health</b>	the composition, structure, and functioning of soil, water, air, and other abiotic features comparable with historic conditions, including the natural abiotic processes that shape the environment.
<b>eutrophication</b>	the process by which a body of water acquires a high concentration of nutrients, particularly phosphates and nitrates, often leading to excessive algae growth. As the algae die and decompose, the amount of available oxygen decreases, causing the death of some aquatic organisms.
<b>even-aged management</b>	a forest management technique in which all the trees in an area are harvested at once or in several cuttings over a short time period to create stands of trees all approximately the same age.
<b>exotic species</b>	a species that is not native to an area and has been introduced intentionally or unintentionally by humans.
<b>expert judgment</b>	The opinion of an expert about a matter of fact.
<b>extinction</b>	the termination of existence of a lineage of organisms (e.g., a subspecies or species).
<b>extirpation</b>	the localized extinction of a species that is no longer found in a locality or country, but still exists elsewhere in the world.
<b>Federal-listed species</b>	a species listed either as endangered, threatened, or species at risk (formerly a “candidate” species) under the Endangered Species Act of 1973, as amended.
<b>fee-title acquisition</b>	the acquisition of most or all of the rights to a tract of land; a total transfer of property rights with the formal conveyance of a title.
<b>fine filter</b>	Important aspects of biodiversity unlikely to be well represented with coarse filters, such as individual species.

<b>flowage</b>	refers to an area along a stream or river periodically flooded by beaver.
<b>flowage easement</b>	the right to control the flow of water from a source such as by impoundment, including the right to overflow, flood, and submerge lands affected.
<b>fragmentation</b>	the process of reducing the size and connectivity of habitat patches. The disruption of extensive habitats into isolated and small patches.
<b>fundamental objectives</b>	Those goals that we ultimately want our actions to achieve; they are statements about the things we value.
<b>furbearer</b>	any mammal that traditionally has been hunted and trapped primarily for fur.
<b>geographic information system</b>	a computer system capable of storing and manipulating spatial mapping data.
<b>glacial fluvial-drift</b>	material transported, sorted, and deposited by flowing glacial meltwater.
<b>glacial moraine</b>	a glacially formed accumulation of unconsolidated glacial debris (soil and rock)
<b>glacial outwash</b>	glacial drift deposited by water flowing from a melting glacier.
<b>glacial till</b>	a mixture of sand, silt, clay, and rock ground up by a glacier and dropped as it retreats.
<b>glide</b>	an area of smooth, fast-moving water in a stream that often separates pools (deep, slow-moving water) from riffles (shallow, fast-moving water).
<b>goals</b>	descriptive statements of desired future conditions.
<b>habitat</b>	an ecosystem, often linked to particular species.
<b>heathlands</b>	dwarf-shrub habitat, dominated by plants of the Ericaceae family, such as blueberry, cranberry, and azalea.
<b>hectare</b>	equal to 2.47 acres
<b>historic conditions</b>	the composition, structure, and functioning of ecosystems resulting from natural processes that we believe, based on sound professional judgment, were present prior to substantial human-related changes to the landscape.
<b>hotspot</b>	locations that harbor unusually high concentrations of species.
<b>hydro-axe</b>	a machinery attachment that mulches vegetation, including shrubs and trees up to 6 inches in diameter
<b>impoundment</b>	a body of water, such as a pond, confined by a dam, dike, floodgate, or other barrier, that is used to collect and hold water.



<b>indicator</b>	In conservation, something that is reported on as evidence of how well the plan objectives are being achieved.
<b>interjurisdictional fish</b>	populations of fish that are managed by two or more State or national or tribal governments because of the scope of their geographic distributions or migrations.
<b>interspersion</b>	refers to how different habitats occur (or are dispersed) across the landscape.
<b>invasive species</b>	a nonnative species whose introduction causes or is likely to cause economic or environmental harm or harm to human health.
<b>issue</b>	any unsettled matter that requires a management decision. For example, a resource management problem, concern, a threat to natural resources, a conflict in uses, or in the presence of an undesirable resource condition.
<b>juxtaposition</b>	the proximity (or arrangement) of distinctly different habitats to each other.
<b>Landscape Conservation Cooperative (LCC)</b>	public-private partnerships that define shared conservation goals and provide the expertise needed to support conservation planning at landscape scales. LCCs generate the tools, methods, and data that managers need to design and deliver conservation using the Strategic Habitat Conservation approach.
<b>landscape conservation design</b>	A partner-driven approach to achieve a sustainable, resilient socio-ecological landscape. It is an iterative, collaborative, and holistic process resulting in strategic and spatial products that provide information, analytical tools, maps, and strategies to achieve landscape goals collectively held among partners.
<b>land trust</b>	Usually nonprofit organizations whose missions are to conserve land through acquisition, conservation easement legislation, and/or ecological management activities.
<b>large saw timber</b>	a tree approximately 15 inches or greater diameter at breast height
<b>late-succession forest</b>	mature and old growth stages; greater than 70 years old
<b>likelihood of success</b>	The estimate that a project will deliver the desired outcomes. This analysis includes assessing the likelihood that the project will be implemented effectively, and, if implemented, will be successful. The estimate might be on a linguistic scale or as a probability.
<b>limiting factor</b>	an environmental limitation that prevents further population growth
<b>liquefied natural gas</b>	natural gas converted into a liquid form by cooling to a very low temperature
<b>mast</b>	fruits and nuts that provide food for wildlife. Soft mast includes most fruits with fleshy coverings. Hard mast includes nuts such as acorns, beech nuts, and hickory nuts.
<b>microhabitats</b>	a small, specific habitat, such as under a log or a hole in a tree.

<b>midden</b>	a pile or mound of mussel shells and other debris indicating the site of a human settlement
<b>mid-successional forest</b>	the pole-sawlog stage; 16-70 years old
<b>millinery trade</b>	the use of bird feathers in women's hats and other clothing.
<b>minimum variable population (MVP)_</b>	The size at which a population's survival could be considered reasonably certain.
<b>National Wildlife Refuge System</b>	all lands, waters, and interests therein administered by the U.S. Fish and Wildlife Service as wildlife refuges, wildlife ranges, wildlife management areas, waterfowl production areas, and other areas for the protection and conservation of fish, wildlife and plant resources
<b>Neotropical migratory bird</b>	a bird species that breeds north of the United States/Mexico border migrate and winters primarily south of the U.S. border in Mexico, the West Indies, or Central or South America.
<b>Non-consumptive wildlife recreation</b>	wildlife observation, photography, hiking, environmental education and interpretation
<b>nonpoint source pollution</b>	a diffuse form of water quality degradation in which wastes are not released at one specific, identifiable point but from a number of points that are spread out and difficult to identify and control.
<b>nuisance species</b>	plants and animals (sometimes called nonnatives or exotics) that threaten the Lake Champlain Basin's native fish, wildlife, and plants and impede recreational activities.
<b>objectives</b>	actions to be accomplished to achieve a desired outcome or goal. Objectives are more specific, and generally more measurable, than goals.
<b>option</b>	An alternative strategy or action under consideration in a plan.
<b>overstory</b>	the upper canopy layer in a forest
<b>paleontology</b>	the study of prehistoric life
<b>parr</b>	the salmon life stage between fry and smolt; a young salmon distinguished by dark rounded patches evenly spaced along its side.
<b>passive adaptive management</b>	Management in which only one management option or action is selected based on existing information, but results of that choice are monitored, and future management decisions are made based on this additional knowledge.
<b>peatland</b>	a type of wetland with organic or peat soils--the partially or incompletely decomposed remains of dead plants and some animals.
<b>physiographic area</b>	a bird conservation planning unit with relatively uniform vegetative communities, bird populations, and species assemblages, as well as land use and conservation issues, developed by Partners in Flight.

<b>planning context</b>	The circumstances in which a conservation plan is developed. this usually involves considering the purpose of a plan, decisions to be made, decision makers, constraints on a planning process, level of investment in the plan, and audience for the plan.
<b>point source pollution</b>	a source of pollution that involves discharge of waste from an identifiable point, such as a smokestack or sewage-treatment plant.
<b>pole timber</b>	a tree approximately 5 to 10 inches diameter at breast height
<b>pool</b>	an area of relatively deep, slow-moving water is a stream or river; a body of water formed above a dam.
<b>population objectives</b>	describe the desired outcomes. We express objectives as abundance, trend, change of distribution, vital rates, or by using other measurable indices of population status based on the best biological information. We use these objectives, which are dependent on the scale of the population measured, to assess how well we are performing our management actions.
<b>preferred alternative</b>	the Service's selected alternative identified in the Draft Comprehensive Conservation Plan.
<b>prehistoric</b>	refers to the period before written history
<b>prescribed fire</b>	the application of fire to wildland fuels, either by natural or intentional ignition, to achieve identified land use objectives.
<b>priority conservation species</b>	those species requiring focused resource commitments due to legal status, management need, vulnerability, and geographic areas of importance.
<b>priority public use</b>	a compatible wildlife-dependent recreational use of a refuge involving hunting, fishing, wildlife observation and photography, or environmental education and interpretation.
<b>project proposal</b>	a document recommending the creation of a new refuge or the expansion of the boundary of an existing refuge as identified within a conservation design.
<b>quantitative</b>	An amount that can be measured and expressed numerically.
<b>range</b>	the geographic area within which a particular species is found.
<b>redd</b>	a nest of fish eggs covered by gravel.
<b>relative abundance</b>	an estimate of actual or absolute abundance, usually stated as an index.
<b>release (in forestry)</b>	freeing seedlings and saplings from competition with other trees, shrubs, and herbs. Techniques include removing mature trees in the canopy that are shading seedlings and saplings or thinning stands.
<b>research natural area</b>	part of a national network of reserved areas intended to represent the full array of North American ecosystems; natural processes are allowed to predominate without human intervention.
<b>resilience</b>	the capacity of a system to resist or recover quickly from a perturbation.

<b>restoration</b>	management of a disturbed or degraded habitat that results in the recovery of its original state (e.g., restoration may involve planting native species, removing invasive shrubs, prescribed burning).
<b>riffle</b>	a series of shallow rapids in a stream or river where the water flows quickly over completely or partially submerged rocks and other debris.
<b>riparian</b>	relating the floodplains, banks, and terraces that line rivers.
<b>riparian area</b>	habitat along the banks of a stream, river, or wetland.
<b>risk</b>	An uncertainty that might negatively affect the ability to achieve a project's objectives.
<b>riverine</b>	within the active channel of a river or stream.
<b>sapling</b>	a young tree, approximately 1 to 5 inches diameter at breast height
<b>scoping</b>	a process for determining the scope of issues to be addressed by a comprehensive conservation plan and for identifying the significant issues. Involved in the scoping process are federal, state and local agencies; private organizations; and individuals.
<b>secondary public use</b>	uses other than the six priority public uses-hunting, fishing, wildlife observation, photography, interpretation, and environmental education.
<b>second-growth forest</b>	forest that has re-grown after a major disturbance such as a fire, timber harvest, windstorm, or insect infestation.
<b>selective cutting</b>	the periodic removal of individual trees or groups of trees to improve or regenerate a stand.
<b>shifting mosaic</b>	an interconnected patchwork of distinct vegetation types that may shift across the land surface as a result of dynamic ecosystem processes, such as periodic wildfire or flooding.
<b>silviculture</b>	the science and practice of managing forests.
<b>skid trail</b>	an unsurfaced, single lane trail used for removing harvested trees from the forest. It is usually narrower and steeper than ordinary truck roads.
<b>slash</b>	tree tops, branches, bark, and other residue left on the ground after logging.
<b>small saw timber</b>	a tree approximately 10 to 15 inches diameter at breast height
<b>snag</b>	standing, dead trees. Snags provide important habitat characteristics for many wildlife species. For example, many birds and small mammals will create or use existing cavities in snags for nests and burrows.
<b>spawn</b>	the act of reproduction of fishes--the mixing of the sperm from the male fish and the eggs of a female fish.

<b>special use permit</b>	a permit authorized by the refuge manager for an activity that is not usually available to the general public.
<b>species</b>	a distinctive kind of plant or animal having distinguishable characteristics, and that can interbreed and produce young. In taxonomy, a category of biological classification that refers to one or more populations of similar organisms that can reproduce with each other but is reproductively isolated from—that is, incapable of interbreeding with—all other kinds of organisms.
<b>species richness</b>	a simple measure of species diversity calculated as the total number of species in a habitat or community.
<b>staff gauge</b>	an instrument used to measure water levels
<b>stakeholder</b>	An individual, group, or organization that is interested in some aspect of a conservation plan or project and may be affected by, or will potentially affect, project activities.
<b>stand</b>	an easily defined area of the forest that is relatively uniform in species composition or age and can be managed as a single unit.
<b>stand-replacing fire</b>	a fire that kills all or most living overstory trees in a forest and initiates regrowth. This type of fire can be a ground fire, surface fire, or crown fire, but is usually a combination of two or more types.
<b>stocking</b>	refers to releasing hatchery raised fish into streams and lakes
<b>stopover habitat</b>	habitat where birds rest and feed during migration. Also called staging area.
<b>Strategic Habitat Conservation (SHC)</b>	the adaptive management framework for making management decisions about where and how to deliver conservation efficiently to achieve specific biological outcomes. It requires us to set goals, make strategic decisions about our actions, and constantly reassess and improve our approaches—all critical steps in dealing with a range of landscape-scale resource issues.
<b>strategies</b>	a general approach or specific actions to achieve objectives.
<b>structure</b>	the horizontal and vertical arrangement of trees and other vegetation having different sizes, resulting in different degrees of canopy layering, tree heights, and diameters within a stand.
<b>succession</b>	the natural, sequential change of species composition of a community in a given area
<b>surrogate</b>	A conservation feature used to represent another feature(s) and generally easier to observe, map, or measure than those features it is representing.
<b>surrogate species</b>	Used to define measurable targets and guide conservation design. Represent multiple species and habitats within a defined landscape, geographic area, or specific national wildlife refuge.
<b>swale</b>	a low place, especially a marshy depression.

<b>target</b>	quantitative statements of the outcomes planners want to achieve for each objective.
<b>taxon, <i>pl. taxa</i></b>	in biology, a classification or group, such as a phylum, family, genus, or species
<b>terrestrial</b>	living on land.
<b>territory</b>	an area occupied by a single animal, mated pair, or group that is defended against intruders, especially others of the same species.
<b>threatened species</b>	those plant or animal species likely to become endangered species throughout all of or a significant portion of their range within the foreseeable future. A plant or animal identified and defined in accordance with the 1973 Endangered Species Act and published in the <i>Federal Register</i> .
<b>trade-off</b>	A situation where achievement of one objectives comes at the expense of achieving another objective.
<b>trust resources</b>	national resources entrusted by Congress to the U.S. Fish and Wildlife Service for conservation and protection. These “trust resources” include migratory birds, federal-listed endangered and threatened species, inter-jurisdictional fishes, wetlands, and certain marine mammals.
<b>turbidity</b>	a measure of water clarity that measures the amount of material suspended in water, such as clay, silt, sand, algae, plankton, microbes, etc. The more turbid water is, the cloudy or hazier it is. High turbidity is a water quality concern because suspended particles absorb more heat, leading to higher water temperatures, and subsequent reduced dissolved water concentrations that reduce photosynthesis rates. Also, suspended particles can clog fish gills and smother fish eggs and organisms that live along the bottom of streams.
<b>uncertainty</b>	A situation characterized by imperfect and/or unknown information.
<b>understory</b>	the lower layer of vegetation in a stand, which may include short trees, shrubs, and herbaceous plants
<b>uneven-aged management</b>	a forest management technique that removes some trees in each age or size class, either singly, in groups, or in strips, to maintain a multi-aged stand.
<b>vernal pool</b>	depressions holding water for a temporary period in spring and other high water periods, and in which several species of amphibians lay eggs.
<b>vision statement</b>	A brief and inspirational statement about what the future of a conservation project, initiative, program, or area might look like.
<b>warm-season grass</b>	native prairie grass that grows the most during the summer, when cool-season grasses are dormant.

---

<b>warm-water fishery</b>	a water system that supports fish that are able to tolerate water temperatures above 80 degrees Fahrenheit. Examples of warm-water species are sunfish, yellow perch, catfish, and small and largemouth bass.
<b>water rights</b>	the right of a user to use water from a source such as a river, stream, pond, or groundwater source.
<b>watershed</b>	the geographic area within which water drains into a particular river, stream, or body of water. A watershed includes both the land and the body of water into which the land drains.
<b>Wilderness Area</b>	An area designated by Congress as part of the National Wilderness Preservation System
<b>wilderness study area</b>	Lands and waters identified by inventory as meeting the definition of wilderness and being evaluated for a recommendation that they be included in the Wilderness System.
<b>wildlands reserve</b>	large landscape reserves subject to minimal human impact (largely free from active management) and shaped by natural processes, the ambient environment, and legacies of prior history. They strive to accomplish four objectives: 1) slow the pace of climate change by supporting complex, aging forests that can store twice as much carbon as young forests; 2) provide rare habitats for a diverse array of plants, animals, and micro-organisms; 3) safeguard lands of natural, cultural, and spiritual significance; and 4) serve as unique scientific reference points for evaluation and improvement of management practices elsewhere (Foster et al. 2010).
<b>wildlife-dependent recreation</b>	A use of a Refuge involving hunting, fishing, wildlife observation, wildlife photography, environmental education, or interpretation. The National Wildlife Refuge System Improvement Act of 1997 specifies that these are the six priority general public uses of the National Wildlife Refuge System.
<b>windthrow</b>	the uprooting of and knocking over trees by wind.
<b>woody debris</b>	any pieces of dead woody material on the ground in forests or in streams, such as trunks, branches, and roots.

## Acronym

Acronym	Full Name
<b>ACJV</b>	Atlantic Coast Joint Venture
<b>ADA</b>	Americans with Disabilities Act
<b>AGO</b>	America's Great Outdoors Initiative
<b>AHPA</b>	Archaeological and Historic Preservation Act
<b>AHWP</b>	Annual Habitat Work Plan
<b>AMC</b>	Appalachian Mountain Club
<b>AQI</b>	Air Quality Index
<b>ARPA</b>	Archaeological Resources Protection Act
<b>ASMFC</b>	Atlantic States Marine Fisheries Commission
<b>ATV</b>	All-terrain vehicle
<b>BAT</b>	Biological Assessment Trailer
<b>BBD</b>	Beech bark disease
<b>BCR</b>	Bird Conservation Region
<b>BIDEH</b>	Biological Integrity, Diversity, and Environmental Health
<b>BLM</b>	Bureau of Land Management
<b>BMP</b>	Best management practices
<b>CAA</b>	Clean Air Act
<b>CCC</b>	Civilian Conservation Corps
<b>CCP</b>	Comprehensive Conservation Plan
<b>CCS</b>	Challenge Cost-share
<b>CD</b>	Compatibility determination
<b>CDIP</b>	Career Discovery Internship Program
<b>CE</b>	Categorical exclusion
<b>CEQ</b>	Council of Environmental Quality
<b>CFA</b>	Conservation Focus Area
<b>CFR</b>	Code of Federal Regulations



<b>Acronym</b>	<b>Full Name</b>
<b>cfs</b>	Cubic feet per second
<b>CISA</b>	Community Involved in Sustaining Agriculture
<b>CISMA</b>	Cooperative Invasive Species Management Areas
<b>Conte Act</b>	Silvio O. Conte National Fish and Wildlife Refuge Act of 1991
<b>Conte Refuge</b>	Silvio O. Conte National Fish and Wildlife Refuge
<b>CPA</b>	Conservation Partnership Area
<b>CRASC</b>	Connecticut River Atlantic Salmon Commission
<b>CRCO</b>	Connecticut River Coordinator's Office
<b>CSA</b>	Community Supported Agriculture
<b>CT</b>	Connecticut
<b>CTDEEP</b>	Connecticut Department of Energy and Environmental Protection
<b>dbh</b>	diameter at breast height
<b>DCR</b>	Massachusetts Department of Conservation and Recreation
<b>DDE</b>	dichloro-diphenyl-dichloroethylene
<b>DDT</b>	dichloro-diphenyl-trichloroethane
<b>DED</b>	Dutch elm disease
<b>DO</b>	Dissolved oxygen
<b>DOI</b>	Department of the Interior
<b>DOT</b>	Department of Transportation
<b>DWA</b>	Deer wintering area
<b>EA</b>	Environmental Assessment
<b>EAB</b>	Emerald ash borer
<b>EBTJV</b>	Eastern Brook Trout Joint Venture
<b>EE</b>	Environmental Education
<b>EIS</b>	Environmental Impact Statement
<b>EPA</b>	United States Environmental Protection Agency
<b>FEIS</b>	1995 Final Environmental Impact Statement for Silvio O. Conte National Fish and Wildlife Refuge

<b>Acronym</b>	<b>Full Name</b>
<b>FERC</b>	Federal Energy Regulatory Commission
<b>FMP</b>	Fire Management Plan
<b>FOA</b>	Finding of Appropriateness
<b>FR</b>	Federal Register
<b>Friends of Conte</b>	Friends of Silvio O. Conte National Fish and Wildlife Refuge
<b>GCN</b>	Greatest Conservation Need
<b>GFDC</b>	Great Falls Discovery Center
<b>HMP</b>	Habitat Management Plan
<b>HRI</b>	Habitat Restoration Initiative
<b>HUC</b>	Hydrological Unit Code
<b>HWA</b>	Hemlock wooly adelgid
<b>IBA</b>	Important Bird Area
<b>IMP</b>	Inventory and Monitoring Plan
<b>IPANE</b>	Invasive Plant Atlas of New England
<b>IPCC</b>	Intergovernmental Panel of Climate Change
<b>IUCN</b>	International Union for the Conservation of Nature
<b>LCC</b>	Landscape Conservation Cooperatives
<b>LCHIP</b>	New Hampshire's Land and Community Heritage Investment Program
<b>LISS</b>	Long Island Sound Study
<b>LMRD</b>	Land Management Research Demonstration
<b>LPP</b>	Land Protection Plan
<b>LRTP</b>	Long-range Transportation Plan
<b>LWCF</b>	Land and Water Conservation Fund
<b>MA</b>	Massachusetts
<b>MBCF</b>	Migratory Bird Conservation Fund
<b>MOA</b>	Memorandum of Agreement
<b>MOU</b>	Memorandum of Understanding

Acronym	Full Name
<b>NAAEE</b>	North American Association of Environmental Education
<b>NAAQS</b>	National Ambient Air Quality Standard
<b>NAI</b>	National Association for Interpretation
<b>NALCC</b>	North Atlantic Landscape Conservation Cooperative
<b>National Register</b>	National Register of Historic Places
<b>NAWMP</b>	North American Waterfowl Management Plan
<b>NBS</b>	National Blueway System
<b>NEC</b>	New England cottontail
<b>NECIA</b>	Northeast Climate Impacts Assessment
<b>NEK</b>	Northeast Kingdom (Region of Northern Vermont)
<b>NEPA</b>	National Environmental Policy Act of 1969
<b>NEPCoP</b>	New England Plant Conservation Program
<b>NETHC</b>	Northeast Terrestrial Habitat Classification System
<b>NFWPCAS</b>	National Fish, Wildlife and Plants Climate Adaptation Strategy
<b>NGO</b>	Non-governmental organization
<b>NH</b>	New Hampshire
<b>NHFG</b>	New Hampshire Fish and Game Department
<b>NHPA</b>	National Historic Preservation Act
<b>NIPGro</b>	New England Invasive Plant Group
<b>NNL</b>	National Natural Landmark
<b>NOAA</b>	National Oceanic and Atmospheric Administration
<b>NPS</b>	National Park Service
<b>NRCS</b>	Natural Resources Conservation Service
<b>NSPS</b>	New Source Performance Standards
<b>NWPS</b>	National Wilderness Preservation System
<b>NWRS</b>	National Wildlife Refuge System
<b>OHVs</b>	Off-highway vehicles

<b>Acronym</b>	<b>Full Name</b>
<b>ORV</b>	Off-road vehicles
<b>Partners</b>	Partners for Fish and Wildlife
<b>PCB</b>	polychlorinated biphenyl
<b>ppm</b>	parts per million
<b>PRRC</b>	Priority Refuge Resources of Concern
<b>PUP</b>	Pesticide Use Proposal
<b>QR Code</b>	Quick Response Code
<b>RAPP</b>	Refuge Annual Performance Plans
<b>Refuge System</b>	National Wildlife Refuge System
<b>RGGI</b>	Regional Greenhouse Gas Initiative
<b>RHPO</b>	Regional Historic Preservation Officer
<b>RNA</b>	Research Natural Area
<b>ROD</b>	Record of Decision
<b>RONs</b>	Refuge Operations Need System
<b>SAMMS</b>	Service Asset Management and Maintenance System
<b>SCA</b>	Student Conservation Association
<b>Service</b>	United States Fish and Wildlife Service
<b>SFA</b>	Special Focus Area
<b>SGCN</b>	Species of greatest conservation concern
<b>SHC</b>	Strategic Habitat Conservation
<b>SHPO</b>	State Historic Preservation Officer
<b>SLAMM</b>	Sea Level Affecting Marshes Model
<b>STEM</b>	Science, Engineering, and Math
<b>SUV</b>	Sport Utility Vehicle
<b>THPO</b>	Tribal Historic Preservation Officer
<b>TNC</b>	The Nature Conservancy
<b>TPL</b>	Trust for Public Land

Acronym	Full Name
<b>TU</b>	Trout Unlimited
<b>TWS</b>	The Wildlife Society
<b>UCS</b>	Union of Concerned Scientists
<b>USACE</b>	United States Army Corps of Engineers
<b>USCB</b>	United States Census Bureau
<b>USDA</b>	United States Department of Agriculture
<b>USFWS</b>	United States Fish and Wildlife Service
<b>USGS</b>	United States Geological Survey
<b>VAST</b>	Vermont Association of Snow Travelers
<b>VFWD</b>	Vermont Fish and Wildlife Department
<b>VINS</b>	Vermont Institute of Natural Science
<b>VOC</b>	Volatile organic compounds
<b>VT</b>	Vermont
<b>WAP</b>	State Wildlife Action Plan
<b>watershed</b>	Connecticut River watershed
<b>WDMU</b>	Woodcock Demonstration Management Units
<b>WMA</b>	Wildlife Management Area
<b>WoW Express</b>	Watershed-on-Wheels Express Mobile Visitor Center
<b>WRDA</b>	Water Resources Development Act
<b>WSA</b>	Wilderness Study Area
<b>WUI</b>	Wildland-urban interface
<b>YCC</b>	Youth Conservation Corps

## Species Scientific Names

Common Name	Scientific Name
Alder species	<i>Alnus</i> spp.
Alewife	<i>Alosa pseudoharengus</i>
Alewife floater	<i>Anodonta implicata</i>
American beach grass	<i>Ammophila breviligulata</i>
American beaver	<i>Castor canadensis</i>
American beech	<i>Fagus grandifolia</i>
American bittern	<i>Botaurus lentiginosus</i>
American black duck	<i>Anas rubripes</i>
American chestnut	<i>Castanea dentata</i>
American clam shrimp	<i>Limnadia lenticularis</i>
American crow	<i>Corvus brachyrhynchos</i>
American eel	<i>Anguilla rostrata</i>
American elm	<i>Ulmus americana</i>
American goldfinch	<i>Carduelis tristis</i>
American hornbeam	<i>Carpinus caroliniana</i>
American kestrel	<i>Falco sparverius</i>
American marten	<i>Martes americana</i>
American oystercatcher	<i>Haematopus palliatus</i>
American pipit	<i>Anthus rubescens</i>
American redstart	<i>Setophaga ruticilla</i>
American robin	<i>Turdus migratorius</i>
American shad	<i>Alosa sapidissima</i>
American wigeon	<i>Anas americana</i>
American woodcock	<i>Scolopax minor</i>
Amur corktree	<i>Phellodendron amurense</i>
Apple species	<i>Malus</i> spp.
Arrow arum	<i>Peltandra virginica</i>
Ash species	<i>Fraxinus</i> spp.
Asian longhorn beetle	<i>Anoplophora glabripennis</i>

Common Name	Scientific Name
Asiatic clam	<i>Corbicula fluminea</i>
Atlantic salmon	<i>Salmo salar</i>
Atlantic sturgeon	<i>Acipenser oxyrinchus</i>
Atlantic white cedar	<i>Chamaecyparis thyoides</i>
Auricled twayblade	<i>Listera auriculata</i>
Autumn olive	<i>Elaeagnus umbellata</i>
Bald eagle	<i>Haliaeetus leucocephalus</i>
Balsam fir	<i>Abies balsamea</i>
Balsam poplar	<i>Populus balsamifera</i>
Baltimore oriole	<i>Icterus galbula</i>
Banded sunfish	<i>Enneacanthus obesus</i>
Barn owl	<i>Tyto alba</i>
Barred owl	<i>Strix varia</i>
Basswood	<i>Tilia americana</i>
Bayberry	<i>Myrica pensylvanica</i>
Bay-breasted warbler	<i>Dendroica castanea</i>
Beach heather	<i>Hudsonia tomentosa</i>
Beach plum	<i>Prunus maritima</i>
Beaked-rush	<i>Rhynchospora capillacea</i>
Bearberry	<i>Arctostaphylos alpina</i>
Bicknell's thrush	<i>Catharus bicknelli</i>
Big brown bat	<i>Eptesicus fuscus</i>
Bigtooth aspen	<i>Populus grandidentata</i>
Birch species	<i>Betula</i> spp.
Bitternut hickory	<i>Carya cordiformis</i>
Black ash	<i>Fraxinus nigra</i>
Black bear	<i>Ursus americanus</i>
Black cherry	<i>Prunus serotina</i>
Black fly	Family Simuliidae

Common Name	Scientific Name
Black grass (salt meadow rush)	<i>Juncus gerardii</i>
Black gum	<i>Nyssa sylvatica</i>
Black huckleberry	<i>Gaylussacia baccata</i>
Black locust	<i>Robinia pseudoacacia</i>
Black oak	<i>Quercus velutina</i>
Black rail	<i>Laterallus jamaicensis</i>
Black rat snake	<i>Pantherophis alleghaniensis</i>
Black spruce	<i>Picea mariana</i>
Black willow	<i>Salix nigra</i>
Black-and-white warbler	<i>Mniotilta varia</i>
Black-backed woodpecker	<i>Picoides arcticus</i>
Black-billed cuckoo	<i>Coccyzus erythrophthalmus</i>
Blackburnian warbler	<i>Setophaga fusca</i>
Black-crowned night heron	<i>Nyctanassa nycticorax</i>
Blacknose dace	<i>Rhinichthys atratulus</i>
Blackpoll warbler	<i>Setophaga striata</i>
Black-throated blue warbler	<i>Dendroica caerulescens</i>
Black-throated green warbler	<i>Setophaga virens</i>
Blueback herring	<i>Alosa aestivalis</i>
Blueberry species	<i>Vaccinium</i> spp.
Bluefish	<i>Pomatomus saltatrix</i>
Bluegill	<i>Lepomis macrochirus</i>
Bluejoint	<i>Calamagrostis canadensis</i>
Blue-spotted salamander	<i>Ambystoma laterale</i>
Blue-winged teal	<i>Anas discors</i>
Blue-winged warbler	<i>Vermivora pinus</i>
Bobcat	<i>Lynx rufus</i>
Bobolink	<i>Dolichonyx oryzivorus</i>
Bog sedge	<i>Carex paupercula</i>



Common Name	Scientific Name
Boreal chickadee	<i>Poecile hudsonicus</i>
Boreal owl	<i>Aegolius funereus</i>
Boreal turret snail	<i>Valvata sincera</i>
Broad-winged hawk	<i>Buteo platypterus</i>
Brook floater	<i>Alasmindonta varicosa</i>
Brown bullhead (Horned pout)	<i>Ameiurus nebulosus</i>
Brown thrasher	<i>Toxostoma rufum</i>
Brown trout	<i>Salmo trutta</i>
Bufflehead	<i>Bucephala albeola</i>
Burdot (cusk)	<i>Lota lota</i>
Burning bush, winged euonymus	<i>Euonymus alata</i>
Buttonbush	<i>Cephalanthus occidentalis</i>
Caddisflies	Order: Trichoptera
Calmmyweed	<i>Polanisia dodecandra</i>
Canada geese	<i>Branta canadensis</i>
Canada lynx	<i>Lynx canadensis</i>
Canada thistle	<i>Cirsium arvense</i>
Canada warbler	<i>Wilsonia canadensis</i>
Canvasback	<i>Aythya valisineria</i>
Cape May warbler	<i>Setophaga tigrina</i>
Cedar waxwing	<i>Bombycilla cedrorum</i>
Cerulean warbler	<i>Setophaga cerulea</i>
Chain pickerel	<i>Esox niger</i>
Channel catfish	<i>Ictalurus punctatus</i>
Cherry species	<i>Prunus</i> spp.
Chestnut oak	<i>Quercus prinus</i>
Chestnut-colored sedge	<i>Carex lasiocarpa</i>
Chestnut-sided warbler	<i>Setophaga pensylvanica</i>
Chimney swift	<i>Chaetura pelagica</i>

Common Name	Scientific Name
Clapper rail	<i>Rallus longirostris</i>
Cocklebur	<i>Xanthium</i> spp.
Coltsfoot	<i>Tussilago farfara</i>
Common buckthorn	<i>Rhamnus cathartica</i>
Common carp	<i>Cyprinus carpio</i>
Common gallinule (Common moorhen)	<i>Gallinula galeata</i>
Common goldeneye	<i>Bucephala clangula</i>
Common loon	<i>Gavia immer</i>
Common merganser	<i>Mergus merganser</i>
Common mudpuppy	<i>Necturus maculosus</i>
Common reed ( <i>Phragmites</i> )	<i>Phragmites australis</i>
Common shiner	<i>Luxilus cornutus</i>
Common snapping turtle	<i>Chelydra serpentina</i>
Common yellowthroat	<i>Geothlypis trichas</i>
Coontail	<i>Ceratophyllum demersum</i>
Cooper's hawk	<i>Accipiter cooperii</i>
Coyote	<i>Canis latrans</i>
Crappie	<i>Pomoxis</i> spp.
Creek chub	<i>Semotilus atromaculatus</i>
Creeper	<i>Strophitus undulatus</i>
Cuckoos	Family Cuculidae
Deer mouse	<i>Peromyscus maniculatus</i>
Double-crested cormorant	<i>Phalacrocorax carbo</i>
Dowitcher	<i>Limnodromus</i> spp.
Drooping bluegrass	<i>Poa saltuensis</i>
Dwarf chinkapin oak	<i>Quercus prinoides</i>
Dwarf wedgemussel	<i>Alasmindonta heterondon</i>
Eastern American toad	<i>Bufo americanus</i>
Eastern bluebird	<i>Sialia sialis</i>

Common Name	Scientific Name
Eastern box turtle	<i>Terrapene carolina</i>
Eastern brook trout	<i>Salvelinus fontinalis</i>
Eastern chipmunk	<i>Tamias striatus</i>
Eastern cottontail	<i>Sylvilagus floridanus</i>
Eastern cottonwood	<i>Populus deltoids</i>
Eastern cougar	<i>Puma concolor</i>
Eastern elk	<i>Cervus canadensis canadensis</i>
Eastern elliptio	<i>Elliptio complanata</i>
Eastern floater	<i>Pyganodon cataracta</i>
Eastern hemlock	<i>Tsuga canadensi</i>
Eastern hognose snake	<i>Heterodon platirhinos</i>
Eastern kingbird	<i>Tyrannus tyrannus</i>
Eastern lampmussel	<i>Lampsilis radiata radiata</i>
Eastern meadowlark	<i>Sturnella magna</i>
Eastern milksnake	<i>Lampropeltis triangulum</i>
Eastern pearlshell	<i>Margaritifera margaritifera</i>
Eastern phoebe	<i>Sayornis phoebe</i>
Eastern pipistrelle bat	<i>Pipistrellus subflavus</i>
Eastern pond mussel	<i>Ligumia nasuta</i>
Eastern red bat	<i>Lasiurus borealis</i>
Eastern red cedar	<i>Juniperus virginiana</i>
Eastern ribbon snake	<i>Thamnophis sauritus</i>
Eastern small-footed bat	<i>Myotis leibii</i>
Eastern spadefoot toad	<i>Scaphiopus holbrookii</i>
Eastern timber rattlesnake	<i>Crotalus horridus</i>
Eastern towhee	<i>Pipilo erythrophthalmus</i>
Eastern wild turkey	<i>Meleagris gallopavo silvestris</i>
Eastern wolf	<i>Canis lupus lycao</i>
Emerald ash borer	<i>Agrilus planipennis</i>

Common Name	Scientific Name
Ermine	<i>Mustela erminea</i>
Eurasian milfoil	<i>Myriophyllum spicatum</i>
European honeybee	<i>Apis mellifera</i>
Fallfish	<i>Semotilus corporalis</i>
False nettle	<i>Boehmeria cylindrica</i>
Fanwort	<i>Cabomba</i> spp.
Faxon's clam shrimp	<i>Eulimnadia agassizii</i>
Field sparrow	<i>Spizella pusilla</i>
Finescale dace	<i>Phoxinus neogaeus</i>
Fir species	<i>Abies</i> spp.
Fisher	<i>Martes pennanti</i>
Flowering dogwood	<i>Cornus florida</i>
Fowler's toad	<i>Bufo fowleri</i>
Freshwater cordgrass	<i>Spartina pectinmata</i>
Fringed sedge	<i>Carex crinita</i>
Gadwall	<i>Anas strepera</i>
Garber's sedge	<i>Carex garberi</i>
Garlic-mustard	<i>Alliaria petiolata</i>
Gizzard shad	<i>Dorosoma cepedianum</i>
Glasswort	<i>Salicornia depressa</i>
Glossy buckthorn	<i>Frangula alnus</i>
Golden club	<i>Orontium aquaticum</i>
Golden-winged warbler	<i>Vermivora chrysoptera</i>
Grasshopper sparrow	<i>Ammodramus savannarum</i>
Gray birch	<i>Betula populifolia</i>
Gray catbird	<i>Dumetella carolinensis</i>
Gray fox	<i>Urocyon cinereo-argenteus</i>
Gray jay	<i>Perisoreus canadensis</i>
Gray squirrel	<i>Sciurus carolinensis</i>

Common Name	Scientific Name
Gray wolf	<i>Canis lupus</i>
Great blue heron	<i>Ardea herodias</i>
Great crested flycatcher	<i>Myiarchus crinitus</i>
Great egret	<i>Ardea albus</i>
Greater yellowlegs	<i>Tringa melanoleuca</i>
Green ash	<i>Fraxinus pennsylvanica</i>
Green dragon	<i>Arisaema dracontium</i>
Green-winged teal	<i>Anas carolinensis</i>
Grey-cheeked thrush	<i>Catharus minimus</i>
Gypsy moth	<i>Lymantria dispar</i>
Heath hen	<i>Tympanuchus cupido cupido</i>
Hemlock wooly adelgid	<i>Adelges tsugae</i>
Henslow's sparrow	<i>Ammodramus henslowii</i>
Hermit thrush	<i>Catharus guttatus</i>
Hickory species	<i>Carya</i> spp.
Hoary bat	<i>Lasiurus cinereus</i>
Hogchoker	<i>Trinectes maculatus</i>
Hooded merganser	<i>Lophodytes cucullatus</i>
Hooded warbler	<i>Setophaga citrina</i>
Horned lark	<i>Eremophila alpestris</i>
Huckleberry	<i>Vaccinium globulare</i>
Indiana bat	<i>Myotis sodalis</i>
Ipswich sparrow	<i>Passerculus sandwichensis princeps</i>
Japanese barberry	<i>Berberis thunbergii</i>
Japanese knotweed	<i>Fallopia japonica</i>
Japanese stiltgrass	<i>Microstegium vimineum</i>
Jefferson salamander	<i>Ambystoma jeffersonianum</i>
Jesup's milk-vetch	<i>Astragalus robbinsii</i>
Jewelweed	<i>Impatiens capensis</i>

Common Name	Scientific Name
Joe-pye weed	<i>Eutrochium purpureum</i>
Killifish	<i>Fundulus diaphanus</i>
King rail	<i>Rallus elegans</i>
Kudzu	<i>Pueraria montana</i>
Labrador tea	<i>Ledum groenlandicum</i>
Lake chub	<i>Couesius plumbeus</i>
Lake trout	<i>Salvelinus namaycush</i>
Largemouth bass	<i>Micropeterus salmoides</i>
Leafy spurge	<i>Euphorbia esula</i>
Least bitterns	<i>Ixobrychus exilis</i>
Least flycatcher	<i>Empidonax minimus</i>
Least tern	<i>Sterna antillarum</i>
Leatherleaf	<i>Chamaedaphne calyculata</i>
Lesser yellowlegs	<i>Tringa flavipes</i>
Lincoln's sparrow	<i>Melospiza lincolnii</i>
Lingonberry	<i>Vaccinium vitis-idaea</i>
Little blue heron	<i>Egretta caerulea</i>
Little bluestem	<i>Schizachyrium scoparium</i>
Little brown bat	<i>Myotis lucifugus</i>
Longnose dace	<i>Rhinichthys cataractae</i>
Lousiana waterthrush	<i>Parkesia motacilla</i>
Lowbush blueberry	<i>Vaccinium</i> spp.
Mallard	<i>Anas platyrhynchos</i>
Many-fruited false-loosestrife	<i>Ludwigia polycarpa</i>
Maple species	<i>Acer</i> spp.
Marbled salamander	<i>Ambystoma opacum</i>
Marsh elder	<i>Iva annua</i>
Marsh fern	<i>Thelypteris palustris</i>
Mayflies	Order Ephemeroptera

Common Name	Scientific Name
Meadow beauty	<i>Rhexia virginica</i>
Meadow jumping mouse	<i>Zapus hudsonius</i>
Meadow vole	<i>Microtus pennsylvanicus</i>
Merlin	<i>Falco columbarius</i>
Midges	Family: Chironomidae
Mile-a-minute	<i>Persicaria perfoliata</i>
Mink	<i>Mustela vison</i>
Mole salamander	<i>Ambystoma talpoideum</i>
Moose	<i>Alces alces</i>
Morrow's honeysuckle	<i>Lonicera morrowii</i>
Mountain ash	<i>Fraxinus texensis</i>
Mountain maple	<i>Acer spicatum</i>
Mourning dove	<i>Zenaida macroura</i>
Mullet	<i>Mugil cephalus</i>
Multiflora rose	<i>Rosa multiflora</i>
Mummichog	<i>Fundulus heteroclitus</i>
Musk flower	<i>Mimulus moschatus</i>
Musk turtle	<i>Sternotherus oderatus</i>
Muskrat	<i>Ondatra zibethicus</i>
Mute swans	<i>Cygnus olor</i>
Naiad	<i>Najas marina</i>
Narrow-leaved cattail	<i>Typha angustifolia</i>
Nelson's sparrow	<i>Ammodramus nelsoni</i>
New England cottontail	<i>Sylvilagus transitionalis</i>
Nodding bur marigold	<i>Bidens cernua</i>
Northeastern bulrush	<i>Scirpus ancistrochaetus</i>
Northern dusky salamander	<i>Desmognathus fuscus</i>
Northern black racer snake	<i>Coluber constrictor</i>
Northern bog lemming	<i>Synaptomys borealis</i>

Common Name	Scientific Name
Northern copperhead	<i>Agkistrodon contortrix mokasen</i>
Northern diamondback terrapin	<i>Malaclemys terrapin</i>
Northern dusky salamander	<i>Desmognathus fuscus</i>
Northern goshawk	<i>Accipter gentilis</i>
Northern harrier	<i>Circus cyaneus</i>
Northern leopard frogs	<i>Rana pipiens</i>
Northern myotis	<i>Myotis septentrionalis</i>
Northern parula	<i>Setophaga americana</i>
Northern pike	<i>Esox lucius</i>
Northern pintail	<i>Anas acuta</i>
Northern red-bellied turtle	<i>Pseudemys rubriventris</i>
Northern redbelly dace	<i>Phoxinus eos</i>
Northern rough-winged swallow	<i>Stelgidopteryx serripennis</i>
Northern saw-whet owl	<i>Aegolius acadicus</i>
Northern shrike	<i>Lanius excubitor</i>
Northern spring peeper	<i>Pseudacris crucifer</i>
Northern two-lined salamander	<i>Eurycea bislineata</i>
Northern white cedar	<i>Thuja occidentalis</i>
Norway maple	<i>Acer platanoides</i>
Nuthatch species	<i>Sitta</i> spp.
Oak species	<i>Quercus</i> spp.
Olive-sided flycatcher	<i>Contopus cooperi</i>
Orchids	<i>Platanthera</i> spp.
Oriental bittersweet	<i>Celastrus orbiculatus</i>
Ornamental jewelweed	<i>Impatiens glandulifera</i>
Osprey	<i>Pandion haliaetus</i>
Ostrich fern	<i>Matteuccia struthiopteris</i>
Ovenbird	<i>Seiurus aurocapilla</i>
Painted turtle	<i>Chrysemys picta</i>



Common Name	Scientific Name
Pale swallow-wort	<i>Cynanchum rossicum</i>
Palm warbler	<i>Setophaga palmarum</i>
Paper birch	<i>Betula papyrifera</i>
Passenger pigeon	<i>Ectopistes migratorius</i>
Perch species	<i>Perca</i> spp.
Peregrine falcon	<i>Falco peregrinus</i>
Pickereel	<i>Esox</i> spp.
Pickerelweed	<i>Pontederia cordata</i>
Pied-billed grebe	<i>Podilymbus podiceps</i>
Pignut hickory	<i>Carya glabra</i>
Pigweed	<i>Chenopodium album</i>
Pileated woodpecker	<i>Dryocopus pileatus</i>
Pin oak	<i>Quercus palustris</i>
Pine shoot beetle	<i>Tomicus piniperda</i>
Pine warbler	<i>Dendroica pinus</i>
Piping plover	<i>Charadrius melodus</i>
Pitch pine	<i>Pinus rigida</i>
Porcupine	<i>Erethizon dorsatum</i>
Prairie warbler	<i>Dendroica discolor</i>
Precious underwing moth	<i>Catocala pretiosa pretiosa</i>
Puritan tiger beetle	<i>Cicindela puritana</i>
Purple finch	<i>Haemorhous purpureus</i>
Purple loosestrife	<i>Lythrum salicaria</i>
Pygmy shrew	<i>Sorex hoyi</i>
Quagga mussel	<i>Dreissena rostriformis</i>
Quaking aspen	<i>Populus tremuloides</i>
Raccoon	<i>Procyon lotor</i>
Rainbow smelt	<i>Osmerus mordax</i>
Rainbow trout	<i>Oncorhynchus mykiss</i>

Common Name	Scientific Name
Red fox	<i>Vulpes vulpes</i>
Red knot	<i>Calidris canutus</i>
Red maple	<i>Acer rubrum</i>
Red oak	<i>Quercus rubra</i>
Red pine	<i>Pinus resinosa</i>
Red spruce	<i>Picea rubens</i>
Red squirrel	<i>Tamiasciurus hudsonicus</i>
Red-backed salamander	<i>Plethodon cinereus</i>
Red-bellied woodpecker	<i>Melanerpes carolinus</i>
Red-breasted merganser	<i>Mergus serrator</i>
Red-shouldered hawk	<i>Buteo lineatus</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Red-winged blackbird	<i>Agelaius phoeniceus</i>
Reed canary grass	<i>Phalaris arundinacea</i>
Ring-necked duck	<i>Aythya collaris</i>
River bulrush	<i>Scirpus fluviatilis</i>
River herring	<i>Alosa</i> spp.
River otter	<i>Lontra canadensis</i>
Riverweed	<i>Podostemum ceratophyllum</i>
Rock snot	<i>Didymosphenia geminata</i>
Rose-breasted grosbeak	<i>Pheucticus ludovicianus</i>
Round whitefish	<i>Prosopium cylindraceum</i>
Ruddy turnstone	<i>Arenaria interpres</i>
Ruffed grouse	<i>Bonasa umbellus</i>
Rusty blackbird	<i>Euphagus carolinus</i>
Rusty-patched bumble bee	<i>Bombus affinis</i>
Saltmarsh sparrow	<i>Ammodramus caudacutus</i>
Saltmeadow cordgrass	<i>Spartina patens</i>
Saltmeadow rush	<i>Juncus gerardii</i>

Common Name	Scientific Name
Sassafras	<i>Sassafras albidum</i>
Savannah sparrow	<i>Passerculus sandwichensis</i>
Scarlet tanager	<i>Piranga olivacea</i>
Scaup species	<i>Aythya</i> spp.
Scoter species	<i>Melanitta</i> spp.
Scrub oak	<i>Quercus ilicifolia</i>
Sea lamprey	<i>Petromyzon marinus</i>
Sea rocket	<i>Cakile edentula</i>
Sea-beach needlegrass	<i>Aristida tuberculosa</i>
Seaside goldenrod	<i>Solidago sempervirens</i>
Seaside sparrow	<i>Ammodramus maritimus</i>
Sedge wren	<i>Cistothorus platensis</i>
Semipalmated sandpiper	<i>Calidris pusilla</i>
Shagbark hickory	<i>Carya ovata</i>
Sharp-shinned hawk	<i>Accipiter striatus</i>
Sheep laurel	<i>Kalmia angustifolia</i>
Shining rose	<i>Rosa nitida</i>
Short-billed dowitcher	<i>Limnodromus griseus</i>
Shortnose sturgeon	<i>Acipenser brevirostrum</i>
Silky dogwood	<i>Cornus anomum</i>
Silver maple	<i>Acer saccharinum</i>
Silverweed	<i>Argentina anserina</i>
Slimy sculpin	<i>Cottus cognatus</i>
Small sundrops	<i>Oenothera perennis</i>
Small whorled pogonia	<i>Isotria medeoloides</i>
Smallmouth bass	<i>Micropterus dolomieu</i>
Smelt	Family Osmeridae
Smooth cordgrass	<i>Spartina alterniflora</i>
Snaketail dragonfly	<i>Ophiogomphus</i> spp.

Common Name	Scientific Name
Snowshoe hare	<i>Lepus americanus</i>
Snowy egret	<i>Egretta thula</i>
Solitary sandpiper	<i>Tringa solitaria</i>
Sora rail	<i>Porzana carolina</i>
Southern bog lemming	<i>Synaptomys cooperi</i>
Southern red-backed vole	<i>Clethrionomys gapperi</i>
Speckled alder	<i>Alnus incana</i>
Sphagnum moss	<i>Sphagnum</i> spp.
Spikegrass (Salt grass)	<i>Distichlis spicata</i>
Spottail shinner	<i>Notropis hudsonius</i>
Spotted knapweed	<i>Centaurea stoebe</i>
Spotted sandpiper	<i>Actitis macularia</i>
Spotted turtle	<i>Clemmys guttata</i>
Spring salamander	<i>Ambystoma maculatum</i>
Spruce grouse	<i>Falcapennis canadensis</i>
Spruce species	<i>Picea</i> spp.
Star-nosed mole	<i>Condylura cristata</i>
Sticky false asphodel	<i>Tofieldia glutinosa</i>
Stoneflies	Order: Plecoptera
Striped bass	<i>Morone saxatilis</i>
Striped skunk	<i>Mephitis mephitis</i>
Suckers	<i>Catostomus</i> spp.
Sugar maple	<i>Acer saccharum</i>
Summer flounder	<i>Paralichthys dentatus</i>
Sunfish	<i>Lepomis</i> spp.
Swamp darter	<i>Etheostoma fusiforme</i>
Sweet fern	<i>Comptonia peregrine</i>
Sweet flag	<i>Acorus calamus</i>
Sweet gale	<i>Myrica gale</i>

Common Name	Scientific Name
Sweetgum	<i>Liquidambar styraciflua</i>
Switchgrass	<i>Panicum virgatum</i>
Tamarack	<i>Larix laricina</i>
Tapegrass	<i>Vallisneria spiralis</i>
Tennessee warbler	<i>Oreothlypis peregrina</i>
Tessellated darter	<i>Etheostoma olmstedii</i>
Three-square bulrush	<i>Scirpus americanus</i>
Tidewater mucket	<i>Leptodea ochracea</i>
Tiger beetles	Family: Carabidae
Toothcup	<i>Ammannia coccinea</i>
Tree swallow	<i>Tachycineta bicolor</i>
Triangle floater	<i>Alasmidonta undulata</i>
Tricolored bat	<i>Perimyotis subflavus</i>
Turkey vulture	<i>Cathartes aura</i>
Upland sandpiper	<i>Bartramia longicauda</i>
Veery	<i>Catharus fuscescens</i>
Vesper sparrow	<i>Pooecetes gramineus</i>
Viburnum spp.	<i>Viburnum</i> spp.
Virginia opossum	<i>Didelphis virginiana</i>
Virginia pine	<i>Pinus virginiana</i>
Virginia rail	<i>Rallus limicola</i>
Virginia rose	<i>Rosa virginiana</i>
Wall lettuce	<i>Lactuca muralis</i>
Walleye (Walleyed pike)	<i>Sander vitreus</i>
Warbling vireo	<i>Vireo gilvus</i>
Water chestnut	<i>Trapa natans</i>
Water lily	<i>Nymphaea</i> spp.
Water milfoil	<i>Myriophyllum</i> spp.
Water pipit	<i>Anthus spinoletta</i>

Common Name	Scientific Name
Water shrew	<i>Sorex palustris</i>
Waterweed	<i>Elodea canadensis</i>
Whimbrel	<i>Numenius phaeopus</i>
Whip-poor-will	<i>Caprimulgus vociferus</i>
White ash	<i>Fraxinus americana</i>
White meadowseet	<i>Spirea alba</i>
White oak	<i>Quercus alba</i>
White perch	<i>Morone americana</i>
White pine	<i>Pinus strobus</i>
White sucker	<i>Catostomus commersonii</i>
White walnut (Butternut)	<i>Juglans cinerea</i>
White-eyed vireo	<i>Vireo griseus</i>
White-fringed orchid	<i>Platanthera blephariglottis</i>
White-tailed deer	<i>Odocoileus virginianus</i>
White-throated sparrow	<i>Zonotrichia albicollis</i>
Widgeon grass	<i>Ruppia maritima</i>
Wild chervil	<i>Anthriscus sylvestris</i>
Wild rice	<i>Zizania aquatica</i>
Willet	<i>Catoptrophorus semipalmatus</i>
Willow flycatcher	<i>Empidonax traillii</i>
Willow species	<i>Salix</i> spp.
Winter flounder	<i>Pleuronectes americanus</i>
Wolverine	<i>Gulo gulo</i>
Woodchuck	<i>Marmota monax</i>
Wood duck	<i>Aix sponsa</i>
Wood frog	<i>Rana sylvatica</i>
Wood nettle	<i>Laportea canadensis</i>
Wood thrush	<i>Hylocichla mustelina</i>
Wood turtle	<i>Clemmys insculpta</i>

Common Name	Scientific Name
Woodland caribou	<i>Rangifer tarandus caribou</i>
Worm-eating warbler	<i>Helminthos vermivorum</i>
Yarrow	<i>Achillea millefolium</i>
Yellow-bellied flycatcher	<i>Empidonax flaviventris</i>
Yellow birch	<i>Betula alleghaniensis</i>
Yellow corydalis	<i>Corydalis lutea</i>
Yellow lampmussel	<i>Lampsilis cariosa</i>
Yellow-bellied sapsucker	<i>Sphyrapicus varius</i>
Yellow-crowned night heron	<i>Nyctanassa violacea</i>
Yellow-rumped warbler	<i>Setophaga coronata</i>
Yellow-throated vireo	<i>Vireo flavifrons</i>
Zebra mussel	<i>Dreissena polymorpha</i>

